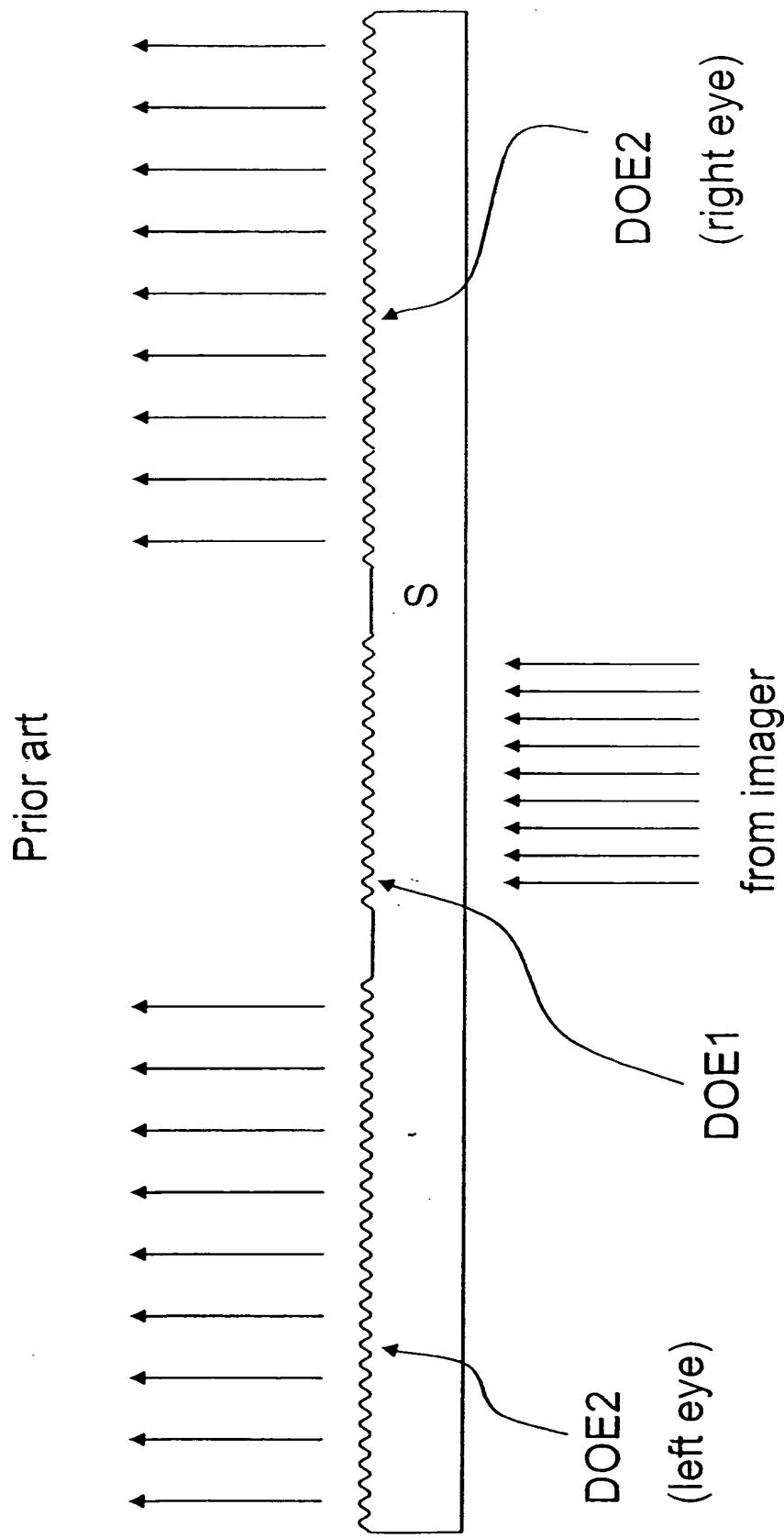
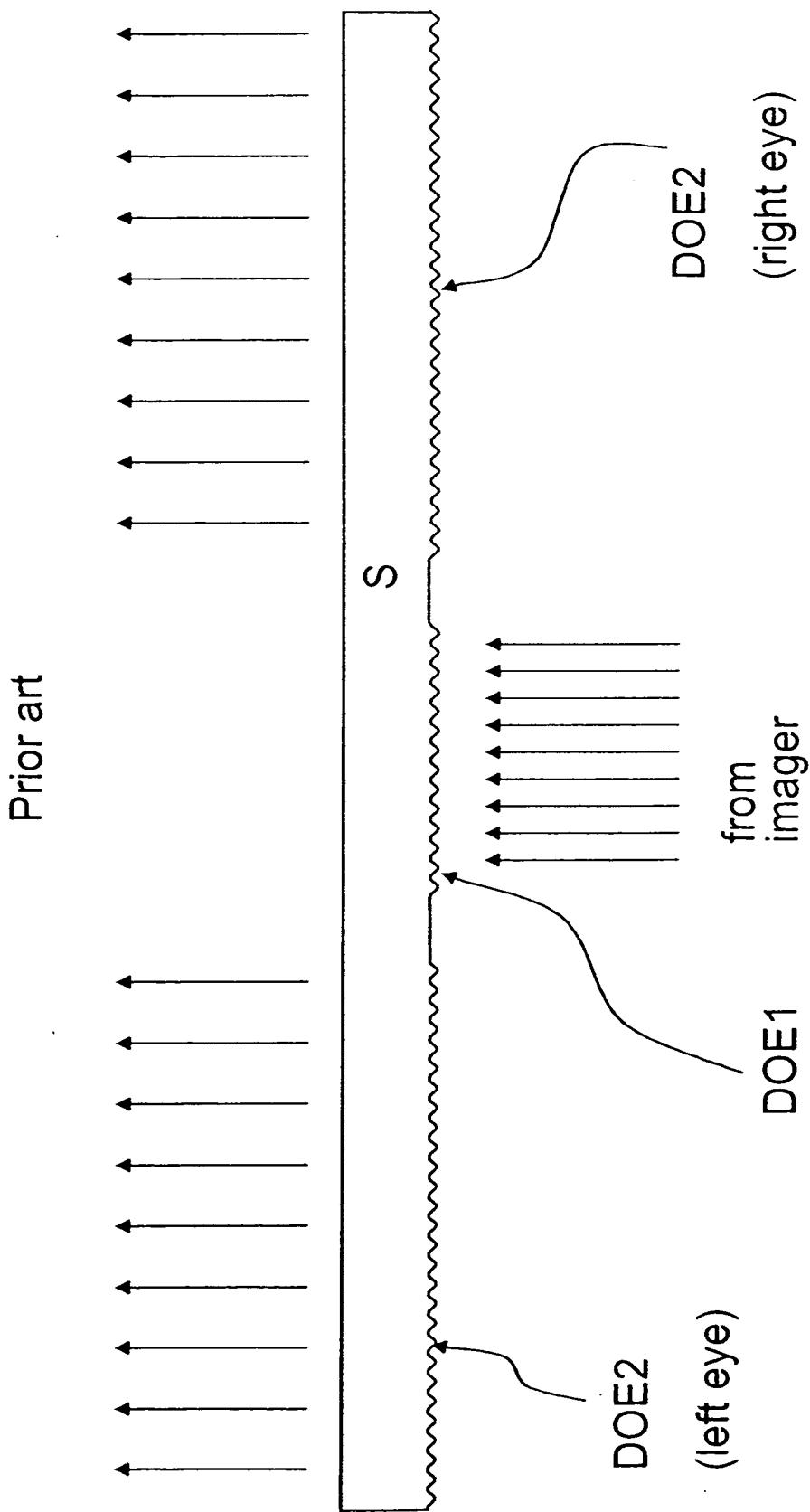




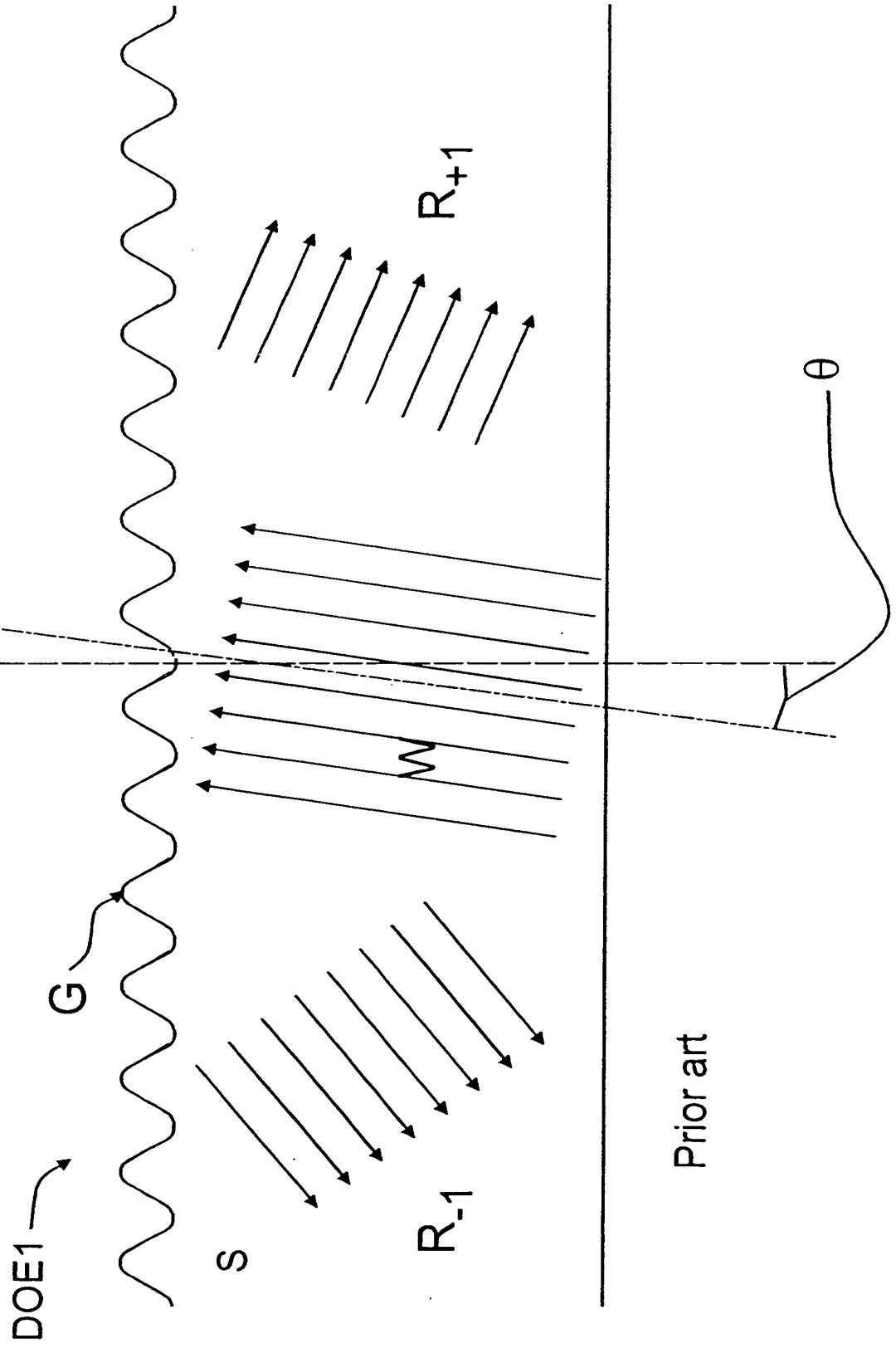
**Figure 1**  
Biocular EPE



**Figure 2**  
Biocular EPE



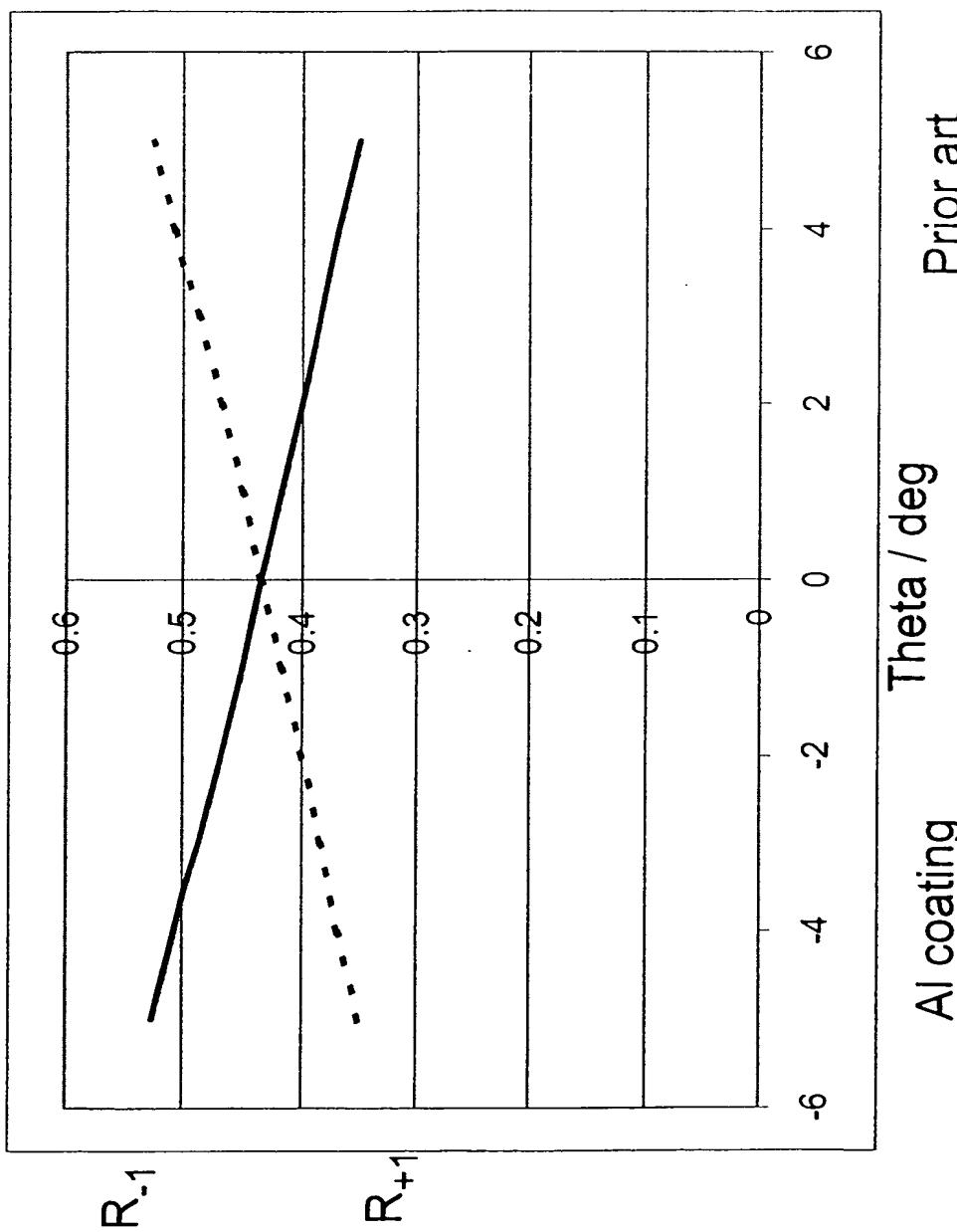
**Figure 3**  
Continuous grating with symmetric period profile



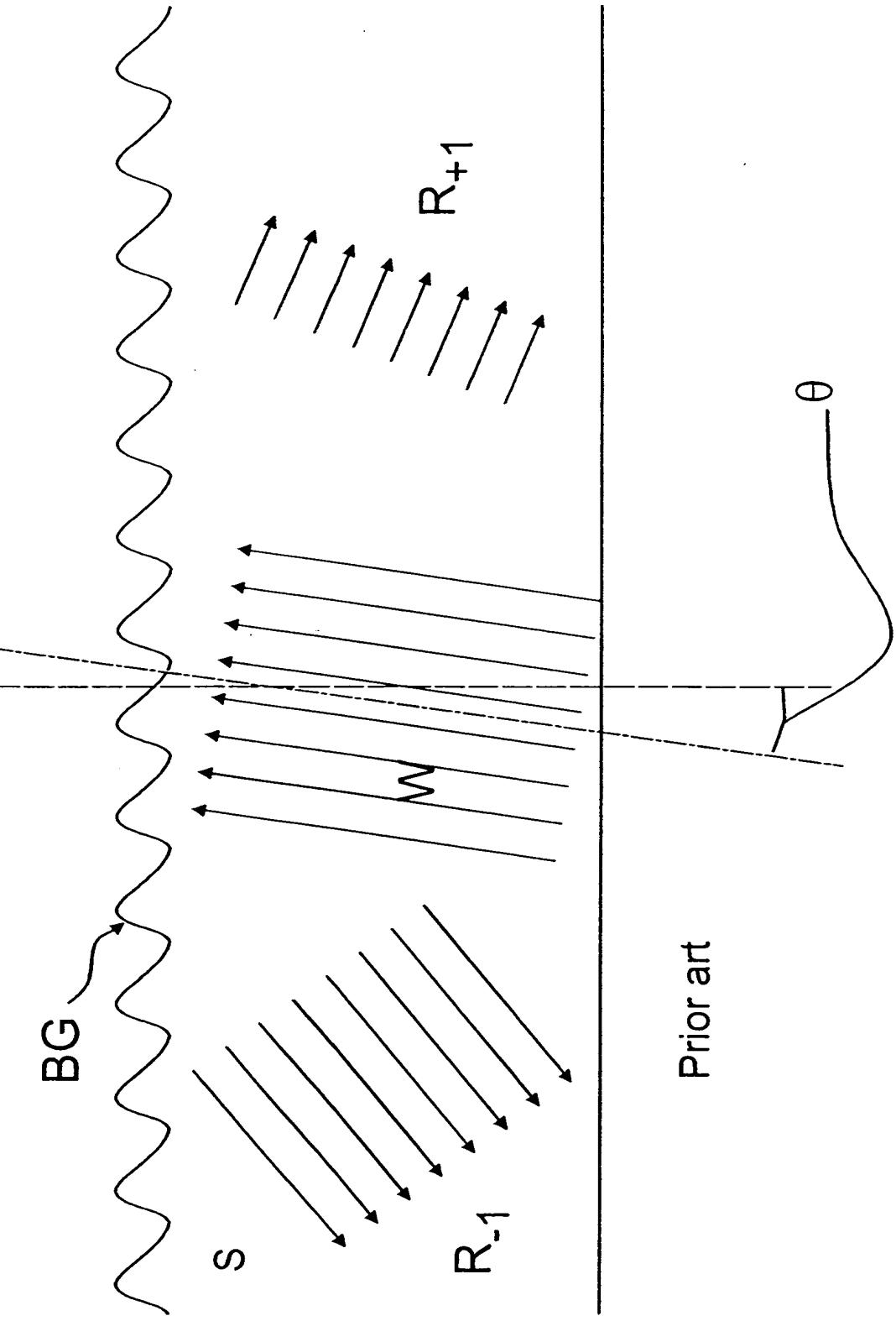
# Figure 4

Angular dependency

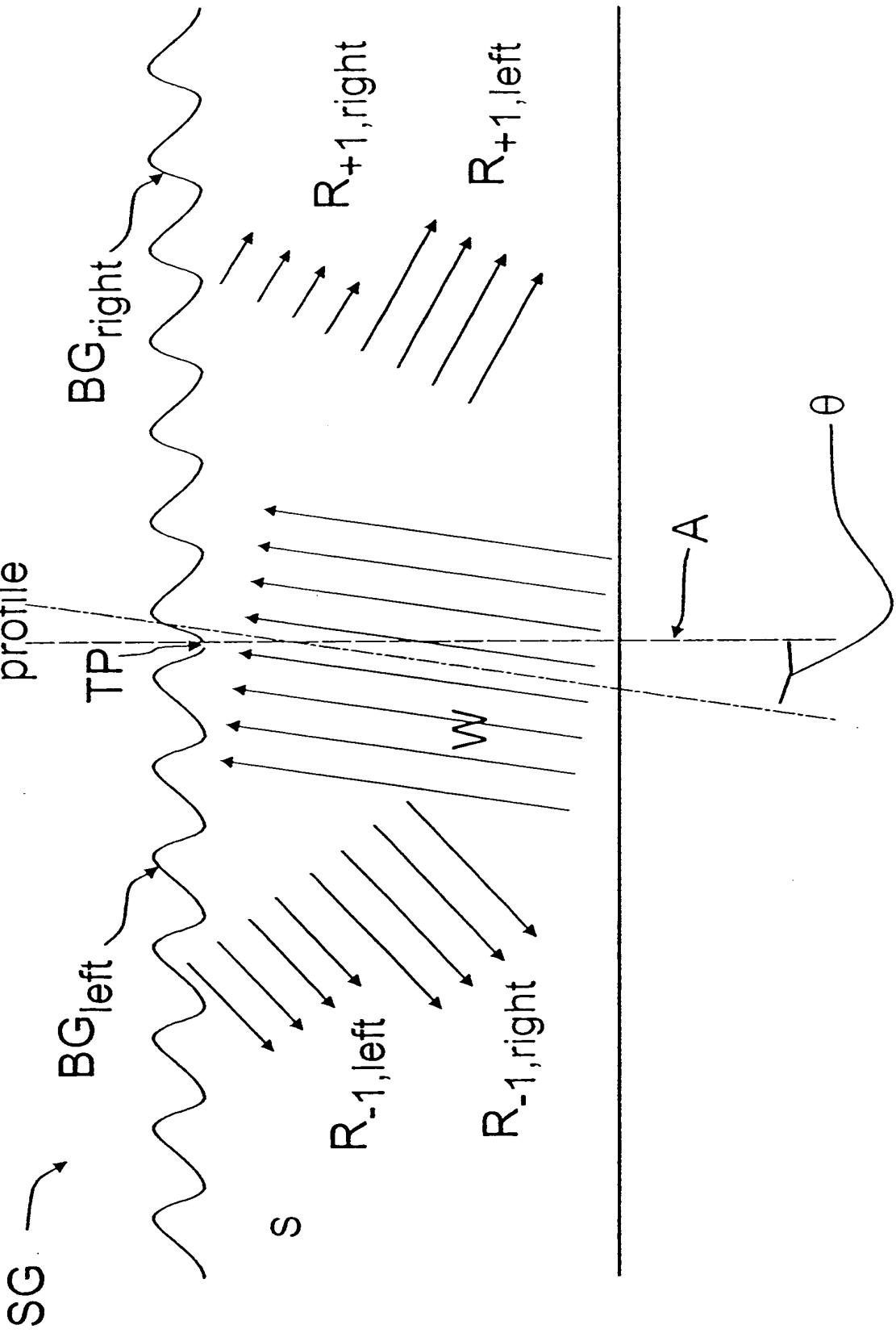
$$\text{Profile} = A * \sin(2\pi x/d)$$



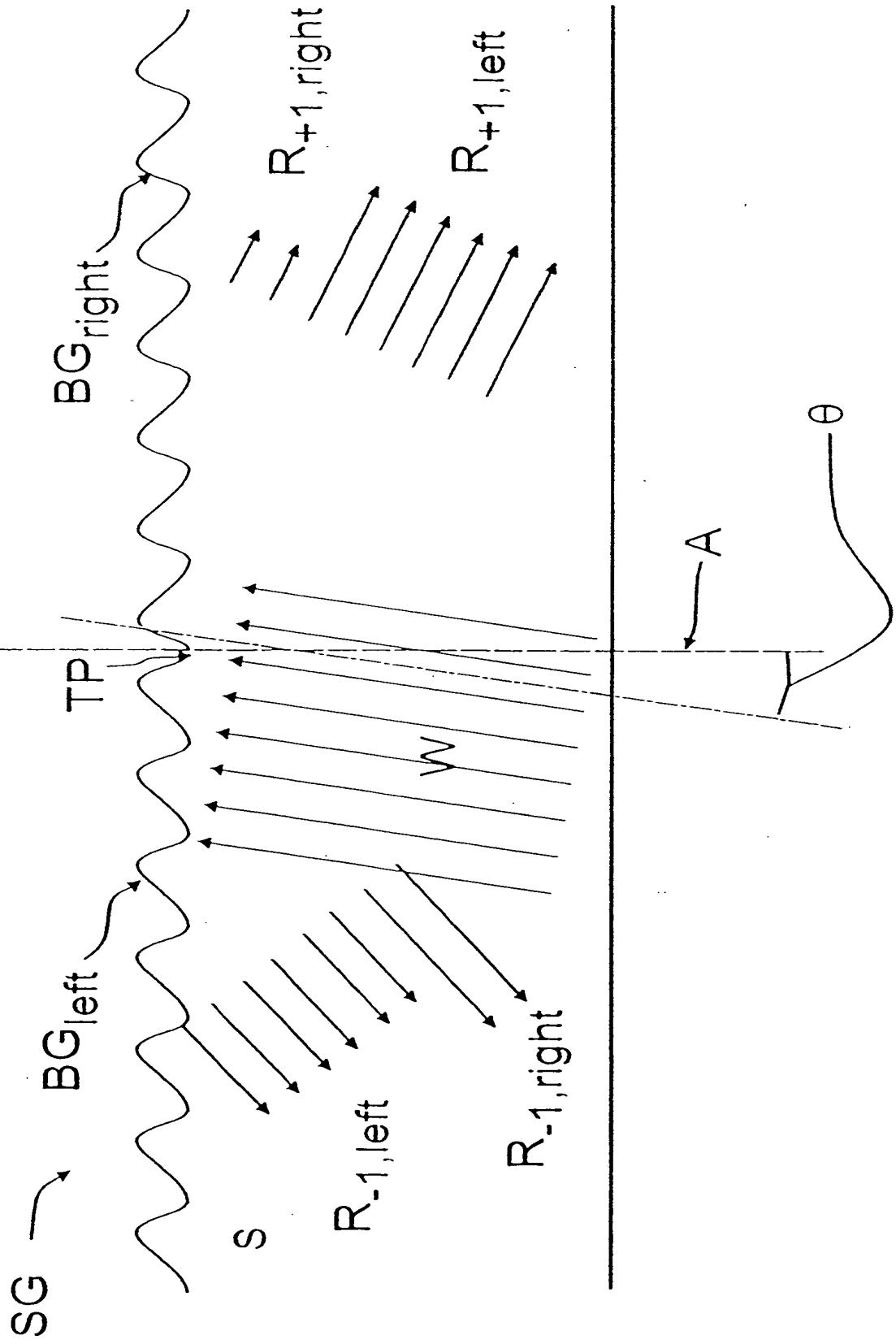
**Figure 5**  
Continuous grating with asymmetric period profile



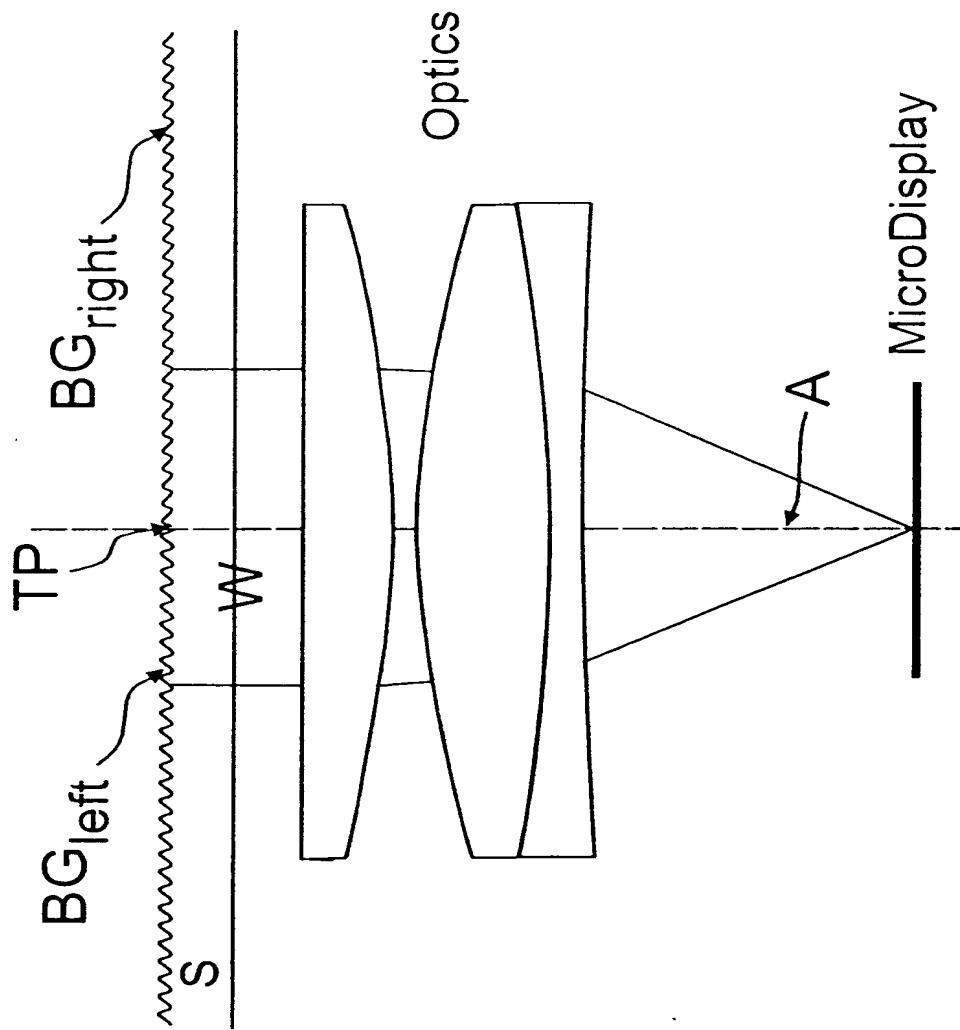
**Figure 6**  
Symmetrically splitted grating with asymmetric period profile



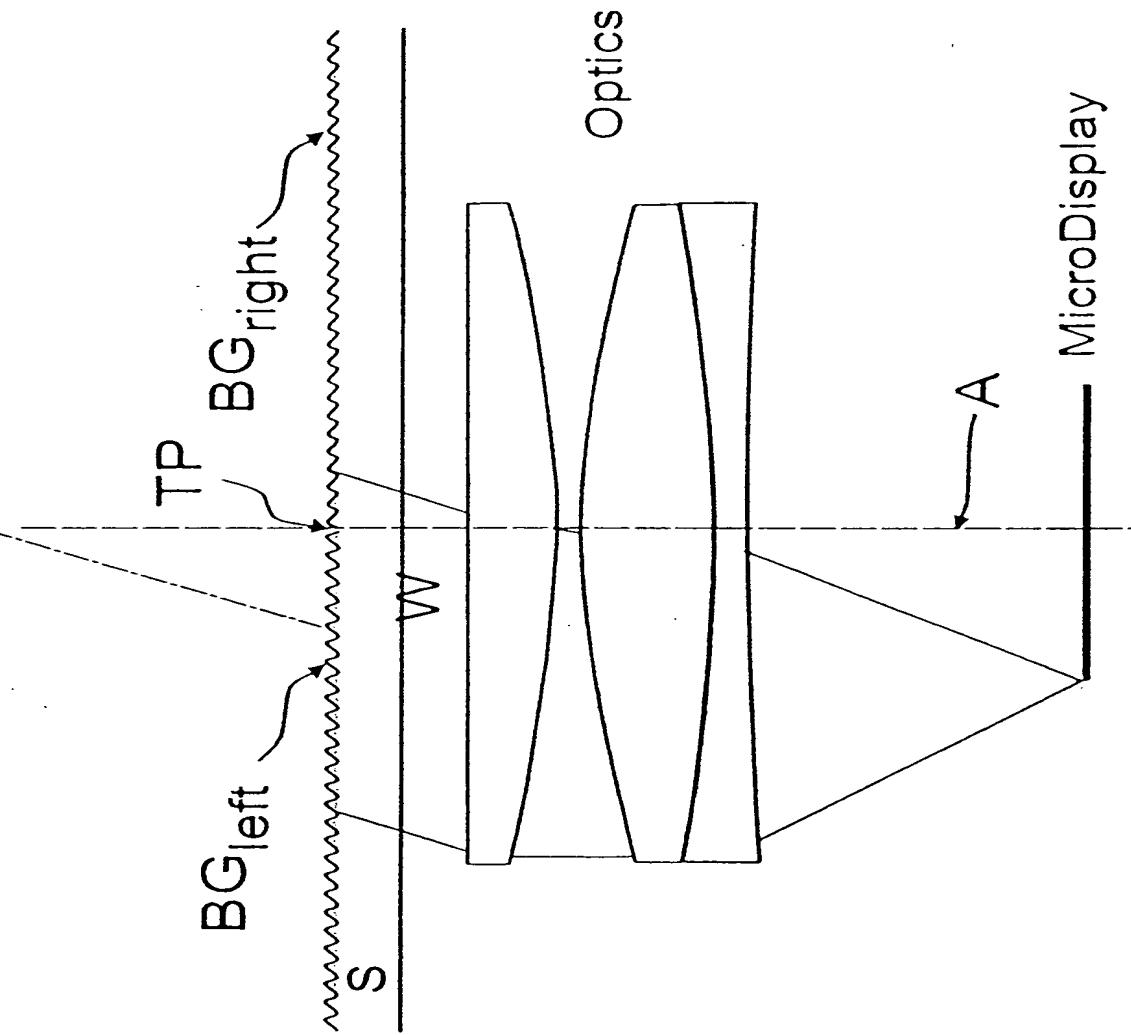
**Figure 7**  
Symmetrically splitted grating with beam shift

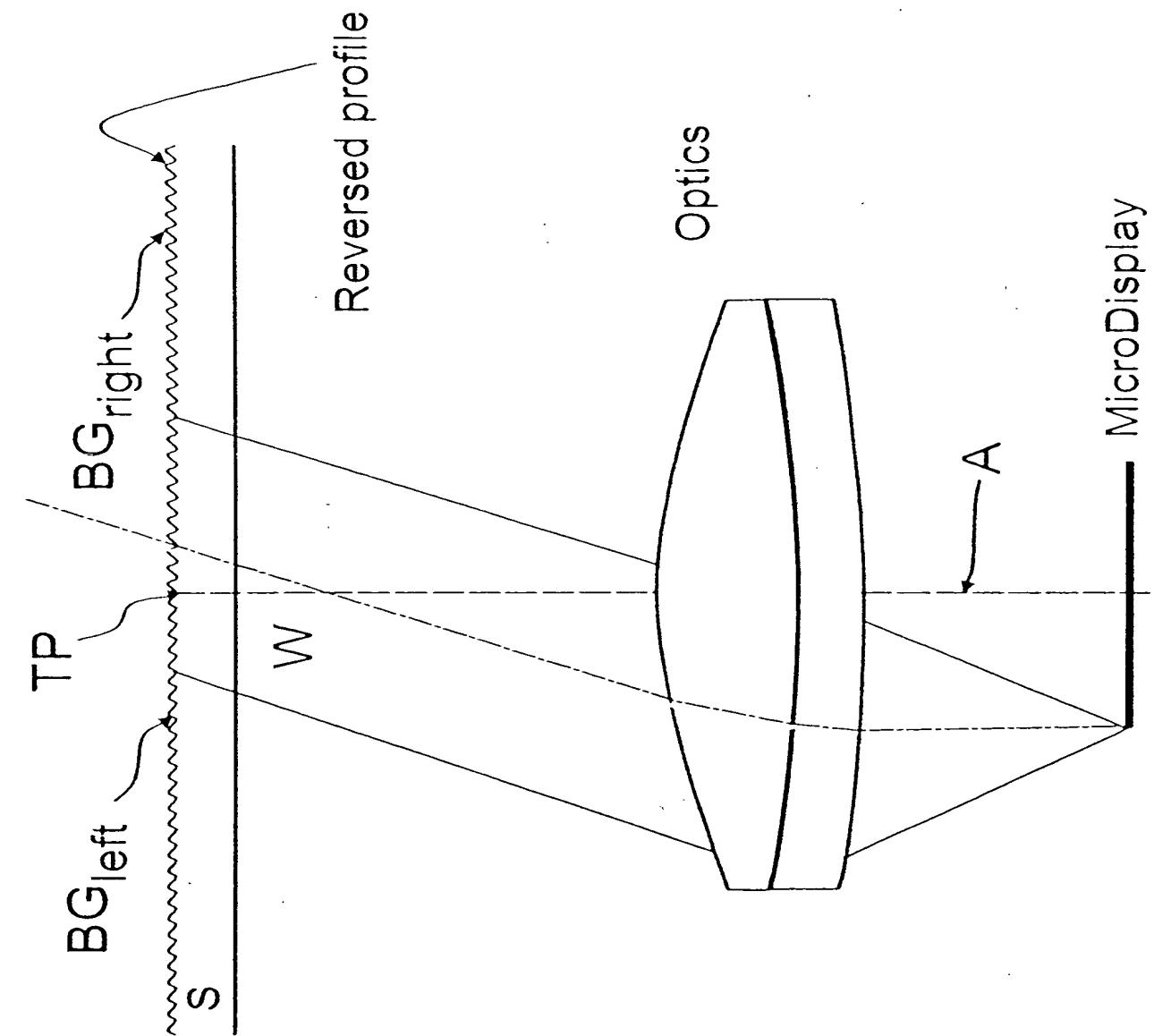


**Figure 8**  
Beam shifting, center



**Figure 9**  
Beam shifting, at the edge



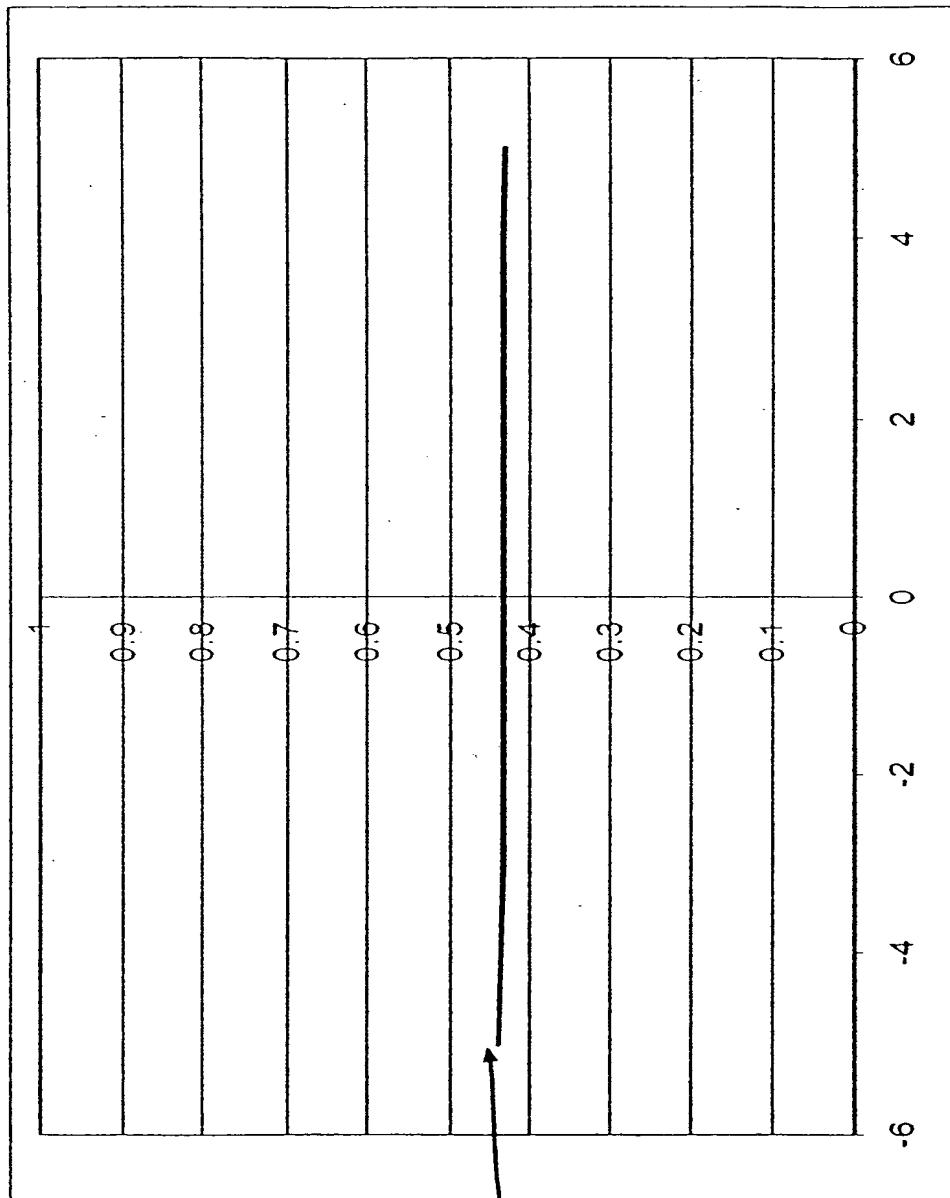


**Figure 10**  
Beam shifting  
alternative setup

**Figure 11**

Compensation of Angular dependence

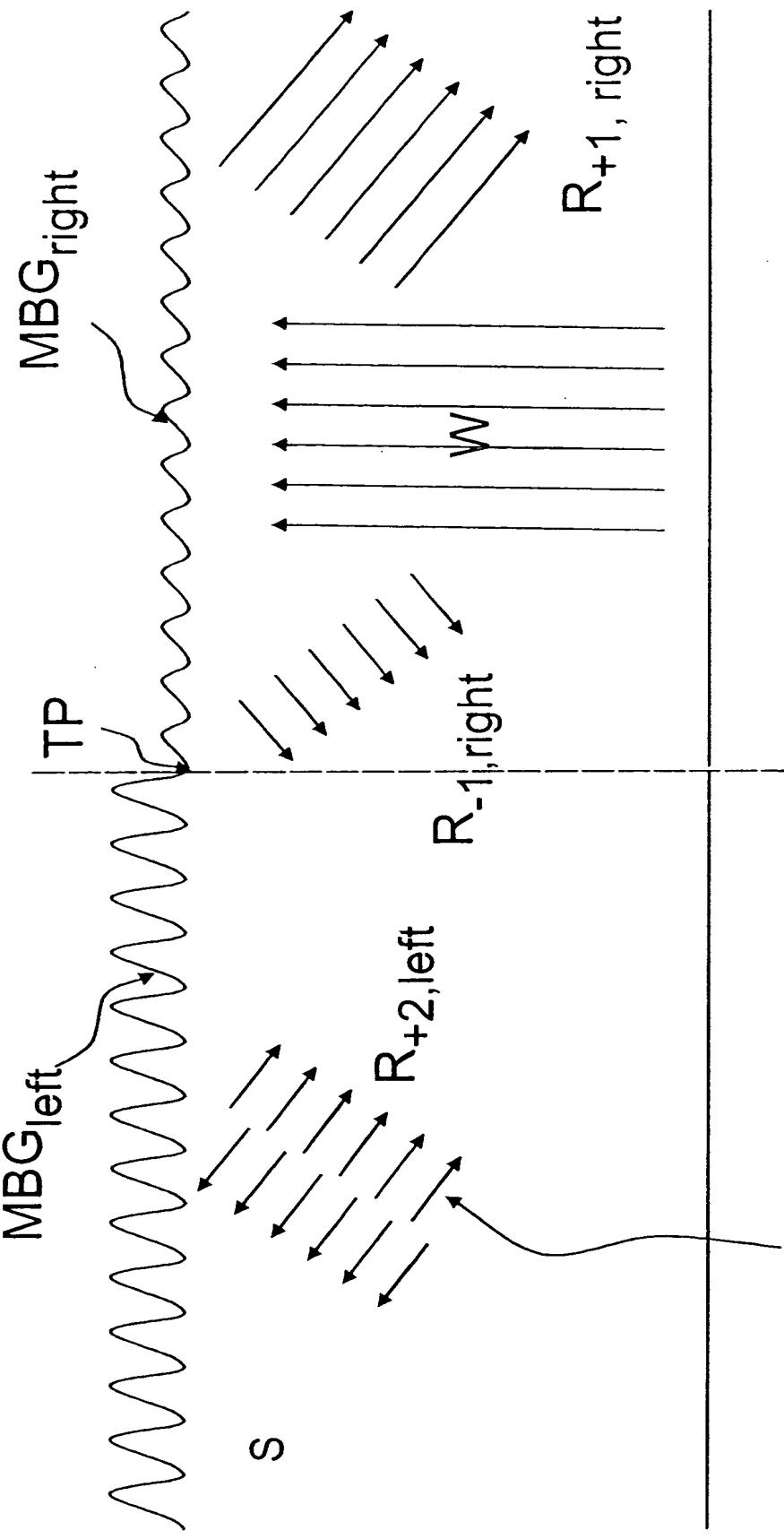
$$\text{Profile} \epsilon = A^* [\sin(2\pi x/d) + 0.25 \sin(4\pi x/d) + 0.05 \sin(6\pi x/d)]$$



$$\eta = (0.5 - k\theta) R_{+1}(-\theta) + (0.5 + k\theta) R_{-1}(\theta)$$

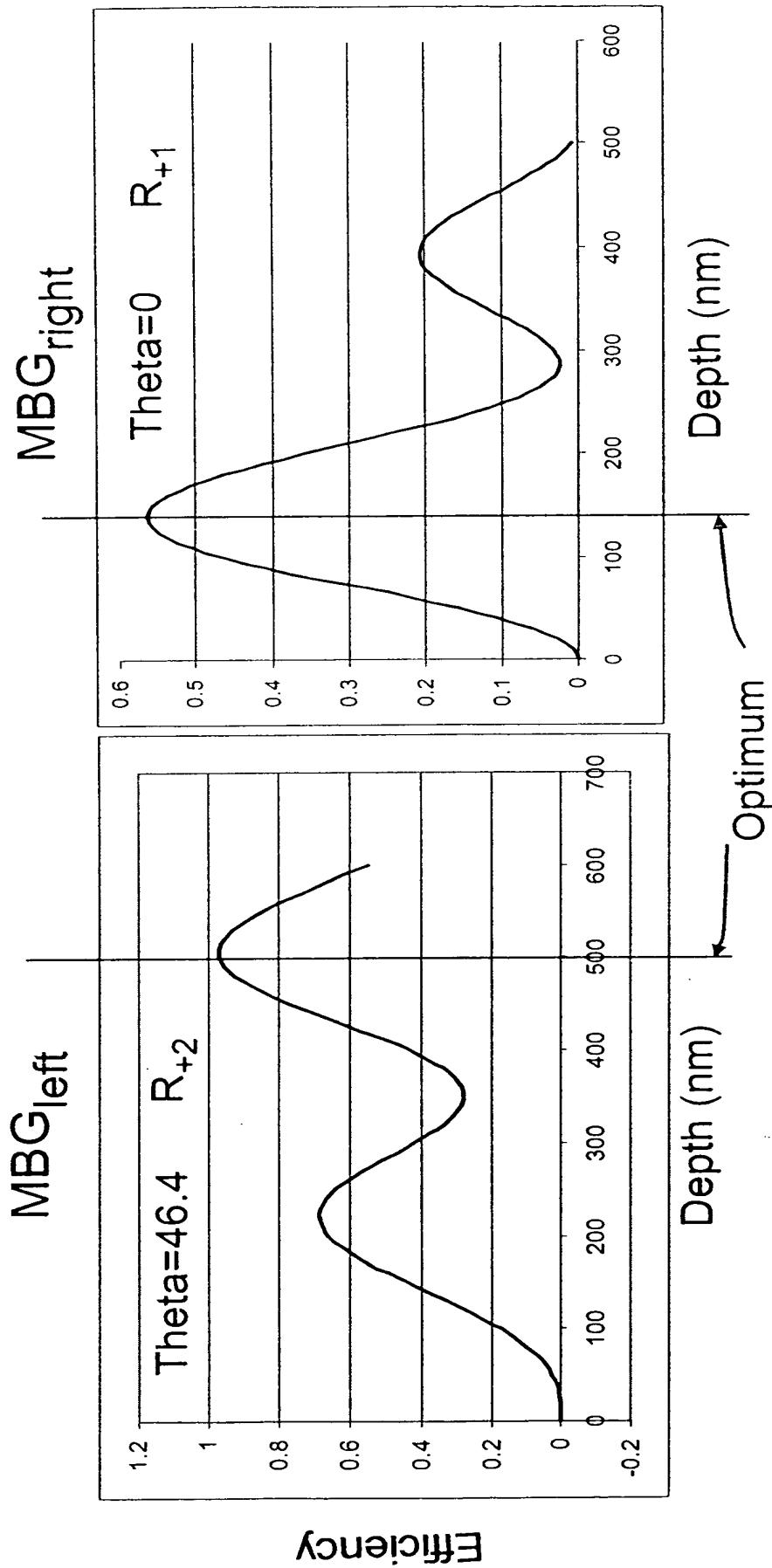
Al coating

SG →  
**Figure 12**  
Monocular EPE



Recirculation: Bragg reflection ( $R_2$ ) from  
very deep profile grating

Coupling Efficiency as a function of grating depth

**Figure 13a****Figure 13b**